



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,688	01/15/2004	Kim R. Smith	163.1836US01	4968
23552	7590	06/22/2005	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			KORNAKOV, MICHAIL	
			ART UNIT	PAPER NUMBER
			1746	
DATE MAILED: 06/22/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/758,688

Applicant(s)

SMITH, KIM R.

Examiner

Michael Kornakov

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 20-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-25 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

138

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 1-21 and 25 in the reply filed on April 19, 2005 is acknowledged. The traversal is on the ground(s) that there is no additional burden on the examiner to examine all groups of claims. This is not found persuasive because the consideration of undue burden is one that must be made by the Examiner. Applicants' arguments that the search of one invention must necessarily result in a search of the other one has been considered, but is not persuasive insofar as the searches are not co-extensive and additional search would of necessity, be required for the combination of inventions. The requirement is still deemed proper, and is therefore made **final**. In addition it is noted that the criteria for patentability for the process and the article are entirely different, including different classification, as discussed in the previous communication, and thus different search IS required for the above groups of invention.

Upon further consideration an additional restriction is required between the following groups:

Group I, Claims 1-19, drawn to a method of polishing hard surface, classified in class 134, subclass 26.

Group II. Claims 20, 21 and 25, drawn to another method of polishing hard surface, classified in class 134, subclass 34.

The inventions are distinct, each from the other because of the following reasons:

Art Unit: 1746

2. Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are two different methods of polishing hard surfaces, which involves different types of polishing agents, and different types of application of such agents, and thus these methods are not disclosed as capable of being used together have different modes of operations and different effects.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Mr. Skoog, esq., on June 16, 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-19. Affirmation of this election must be made by applicant in replying to this Office action. Claims 20-25 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention. Claims 1-19 are examined on the merits.

Interpretation of claims

6. Limitation of the preamble of the instant claims "A method of polishing a hard surface" is interpreted as defined in the instant specification, page 2, lines 23, 24:

Art Unit: 1746

"polishing" means imparting smoothness, gloss, surface protection or decorative finish on a hard surface.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-8, 10 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Perovetz et al (U.S. 4,925,491).

Perovetz discloses a method of polishing hard surfaces by contacting the hard surface, such as metallic plates (abstract), with the composition containing propylene glycol (see col.3, lines 21-25). Polishing compositions comprising propylene glycol and dipropylene glycol in a method of polishing hard surfaces are presented in Examples 1,2,3, and all working examples found in col.6 through col.9. This expressly reads on the limitations of

Art Unit: 1746

claims 1-6 and 16. With regard to claim 8, the composition of Perovetz is diluted to a proper concentration by water, as can be seen from examples 1-15. With regard to claim 7, Perovetz teaches that the humectant is selected from the group consisting of diethylene glycol, dipropylene glycol and triethylene glycol and serves as a **wetting agent**. In a preferred embodiment, dipropylene glycol is used. Two or more of these compounds may also be used in combination (col.4, lines 44-48).

With regard to claim 10, all working examples of Perovetz explicitly contain either the amount of propylene glycol or the amount of dipropylene glycol or combined amount of two glycols within the claimed range.

9. Claims 1-6, 8, 10 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Sabde (U.S. 6,306,012).

Sabde discloses a method for polishing hard surfaces (abstract) by contacting it with lubricating planarizing solution (abstract), wherein this solution contains glycerol, polyethylene glycol and polypropylene glycol (col.3, lines 35-50, col.4, lines 55-60).

The composition is exemplified with 5-20% of polyethylene glycol or polypropylene glycol diluted with ammonia and water (see col.5, lines 10, 11). More specific examples in line 30 of col. 5 provide for 5% of polypropylene glycol in the polishing composition.

See also claim 13 in col. 8

10. Claims 1, 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Darcangelo et al (U.S. 6,375,551).

Art Unit: 1746

Darcangelo discloses a method of polishing a lithography crystal (hard surface) with cerium composition to achieve defined surface roughness (abstract)

A polishing environment such as about 50% water and **50% ethylene glycol** provides for slowing of the cerium polish chemical reactivity by lowering its water content (col.7, lines 58-67, col.8, lines 1-5)

11. Claims 1-6, 8-13, 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by US 20050126630 A1 to Swan.

The hot and cold water ***pipng systems*** (reads on hard surface) are protected (polishing is defined by surface protection, see page 2, lines 23, 24) from freezing temperatures. Swan has found that a ratio of ***50% propylene glycol*** is suitable for protecting the surfaces of the system to a temperature of about -50 F (see 0023 and 0033).

12. Claims 1-16, 18, 19 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,978,469 A to Seaman.

A hard surface cleaning method is disclosed using a composition formulated for cleaning sub-freezing surfaces without solidifying, comprising: about 20-70 wt-% water, about 0.5-20 wt-% nonionic surfactant such as ethoxylated alkyl phenols, about 0.5-15 wt-% alkaline compound such as sodium hydroxide, ***about 10-60 wt-% ethylene and/or propylene glycol***, and about 0.5-20 wt-% of at least one C2-3 alcohol (abstract, col.1, lines 65-68). Table 4 in col.3 provides for using a composition containing 45% and

Art Unit: 1746

50% of propylene glycol. See also table of examples 1 and 2 in col.4, wherein 405 of propylene glycol is used. The steps of the method are described in col.4, lines 55-65, that also addresses the limitations of claims 14 and 19.

13. Claims 1 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by any one of the following, each one individually: CN 1329121 A to Liang (abstract) or JP 10017851.

Liang discloses a method of application of rubber tire protecting agent. It is made up by using the ingredients of glycol, polyvinyl alcohol, glycerine, diacetyl cellulose ester, sodium benzoate, cupric sulfate, talcum powder, cellulose and water through the procedures of dissolving, stirring and heating, etc. This rubber type protecting agent possesses the advantages of good flowability, self-repairing quickness and firmness and wide application temperature range, so that it is applicable **to safety protection** of inflatable rubber tire (see abstract).

JP'851 discloses a method for protecting the surface of pneumatic tire from punctures using an agent that comprises 100 pts.wt water, 5-30 pts.wt. a polyvinyl alcohol, and **20-100 pts.wt. 2-4 C glycol**. (abstract).

14. Other prior art references listed in PTOL-892 show the state of the art in using glycol containing compositions for surface polishing and protection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kornakov whose telephone number is (571) 272-1303. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Kornakov
Primary Examiner
Art Unit 1746

06/20/2005